

## Longest Common Subsequence [\(View\)](#)

Given two strings text1 and text2, return *the length of their longest **common subsequence***. If there is no **common subsequence**, return 0.

A **subsequence** of a string is a new string generated from the original string with some characters (can be none) deleted without changing the relative order of the remaining characters.

- For example, "ace" is a subsequence of "abcde".

A **common subsequence** of two strings is a subsequence that is common to both strings.

### Example 1:

**Input:** text1 = "abcde", text2 = "ace"

**Output:** 3

**Explanation:** The longest common subsequence is "ace" and its length is 3.

### Example 2:

**Input:** text1 = "abc", text2 = "abc"

**Output:** 3

**Explanation:** The longest common subsequence is "abc" and its length is 3.

### Example 3:

**Input:** text1 = "abc", text2 = "def"

**Output:** 0

**Explanation:** There is no such common subsequence, so the result is 0.

### Constraints:

- $1 \leq \text{text1.length}, \text{text2.length} \leq 1000$
- text1 and text2 consist of only lowercase English characters.